Sea Warrior: Placement

EPMAC

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Knowledge Management

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Enlisted Placement Management Center (EPMAC)

Maximize unit personnel readiness IAW CFFC (MCA) guidelines.

Goal

- **Change course to deliver short-term requirements and enable delivery of future processes to realize the full potential of Sea Warrior**
- **Provide a Sea Warrior requisition that contains the required “skill set” that a Sailor needs to walk on board the unit**
  - **Provide 100% trace to legacy systems for derived data**
  - **Leverage job_family, job_code, qualification model to provide more options to management and Sailors**
  - **Ability to quickly evolve to support the entire enlisted enterprise when needed**
  - **Address processes common to the enlisted enterprise first, exceptions later**
  - **Keep underlying logic simple: minimizes cost,**

History

- **Oct 03. Completed initial requisition processing FITGAP. Identified missing critical path processes of competency and position management needed to complete FITGAP.**
- **Feb 04. Developed integrated project plan identifying key relationships and milestones required to deliver the Navy's requisition. All dates were notional.**
- **Mar 04. CFFC meeting in Norfolk to identify information required on the requisition and its relationship to readiness.**

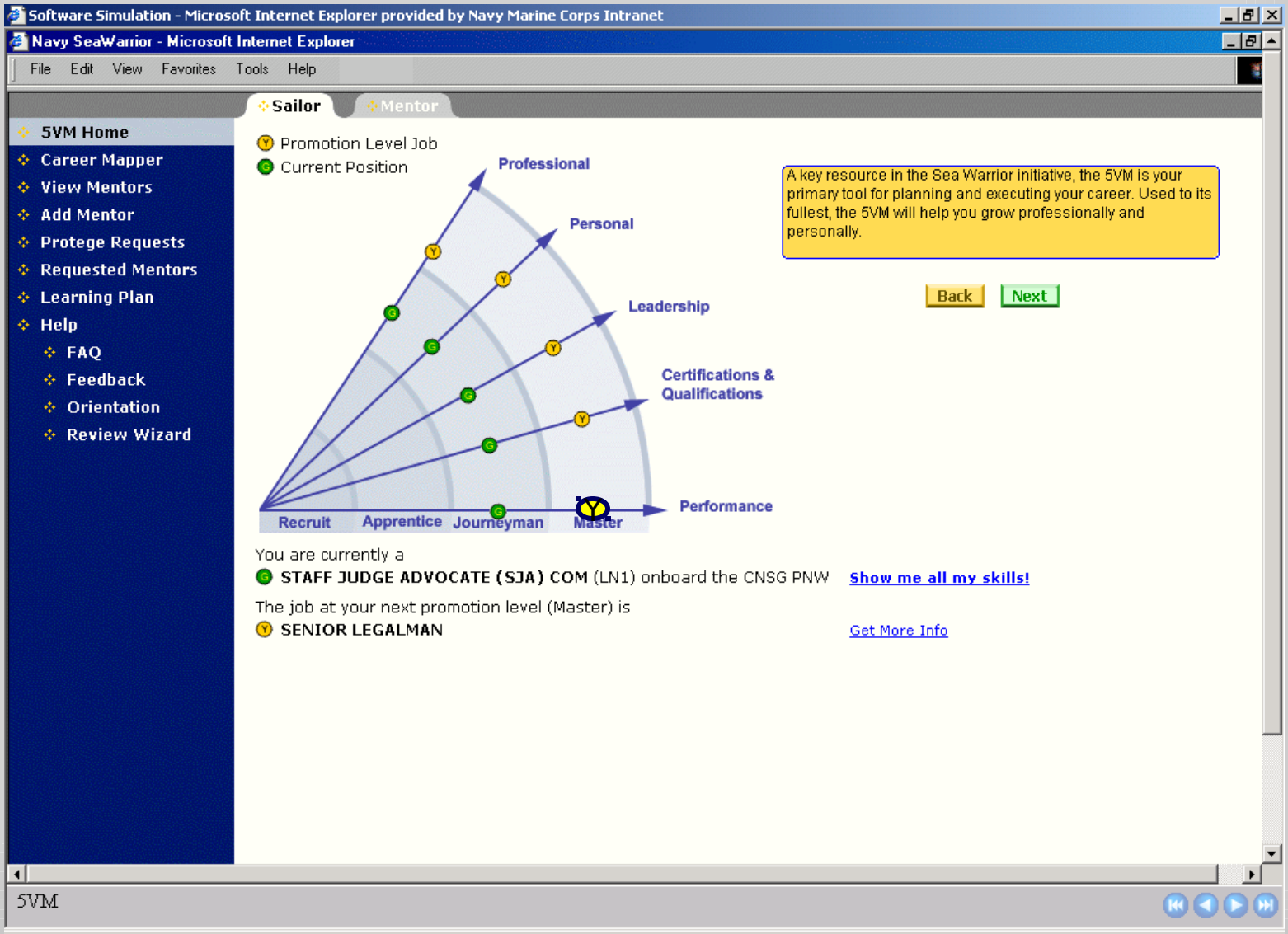
History (cont.)

- **Apr 04. Began mapping additional legacy processes required to build Sea Warrior Requisition. Delivered Position file for entire Navy.**
- **May 04.**
  - **Identified legacy and Sea Warrior data issues. Delivered Sea Warrior Position File for entire Navy based on proposed Distribution job_family construct**
  - **Refined strategy to build a Sea Warrior Position File that mapped to the legacy billet file.**

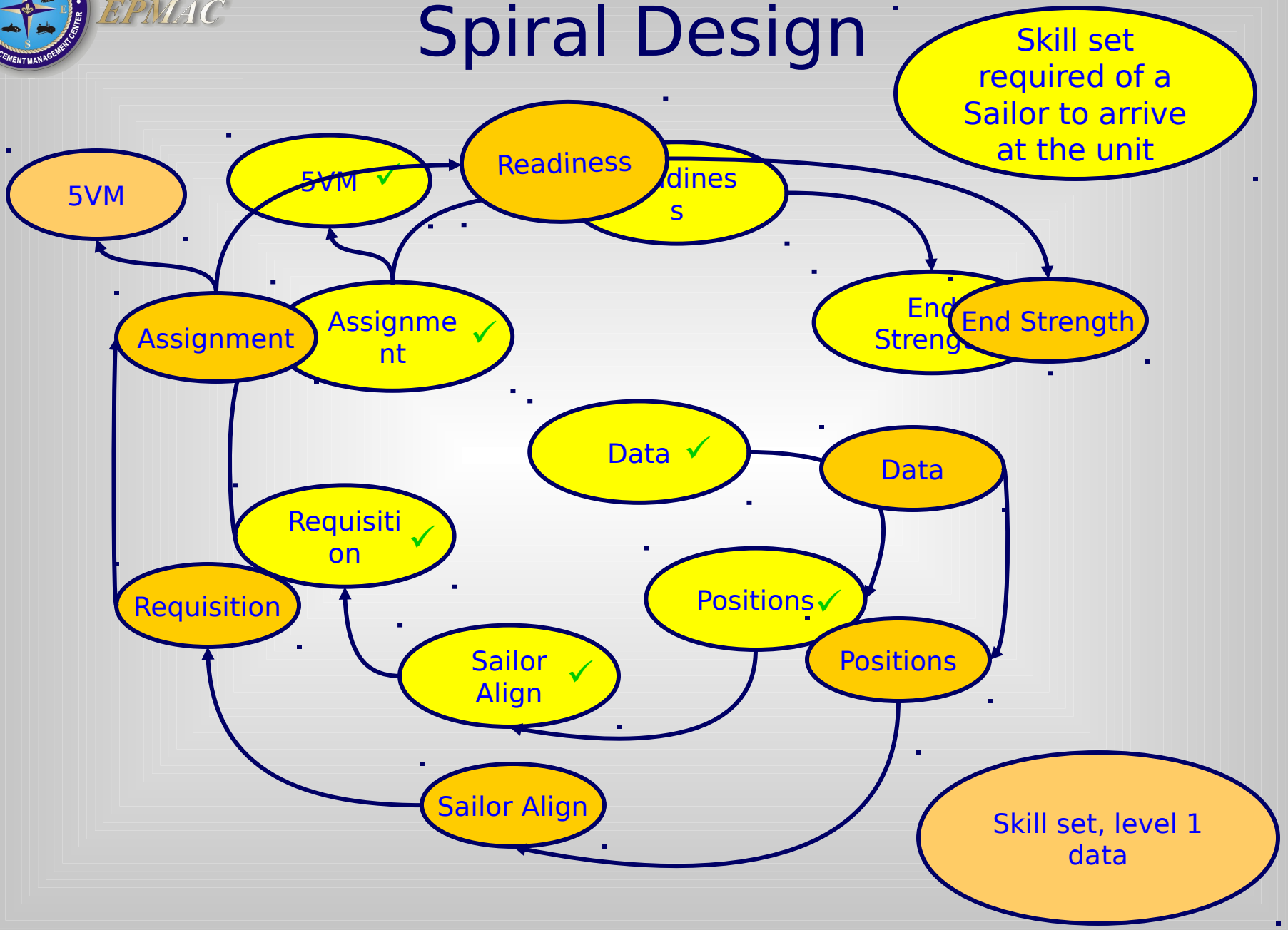
History (cont.)

- **Jun 04**
  - **Delivered the 541(IT) position file based on SkillsNet job_family architecture**
  - **Delivered the 561(YN, RP, LN, CTA) position file based on Distribution job_family architecture**
  - **Assigned Sailors to positions and identified vacant and projected vacant positions. Delivered IT rollers**
  - **Delivered the data elements to begin prioritizing vacant positions to release requisitions**
- **Jul 04…deliver 60-day JCMS Solution**
- **Aug 04 delivered re-wrapped legacy requisition**

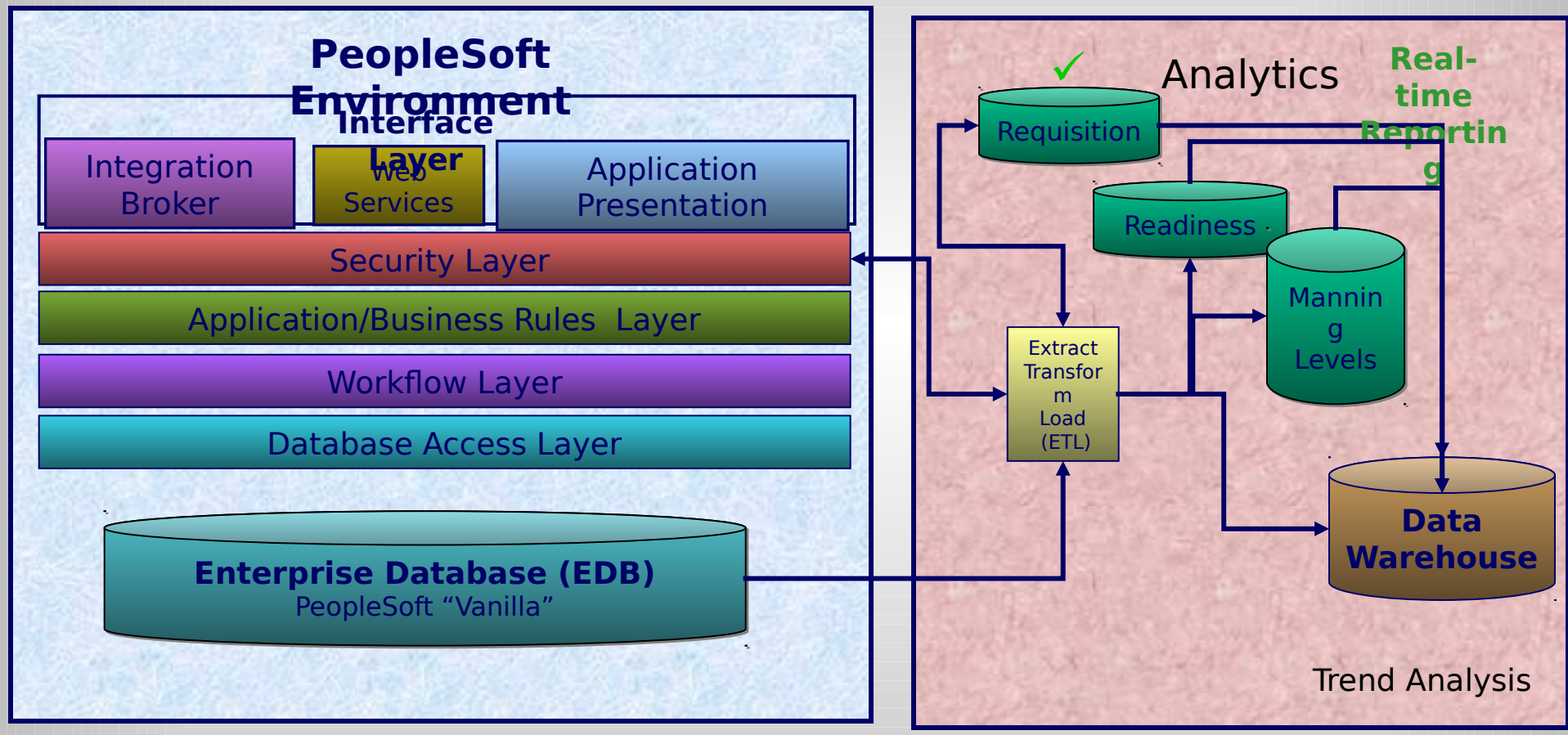
The Five Vector Model (5VM)



Spiral Design



EPMAC Sea Warrior Topology



A Little Computer Science

JOB_FAMILY	DESCRIPTION
541	IT
561	CMD ADMIN

XXX - XX - X

JOB_FAMILY

JOB_CODE

QUAL

JOB_FAMILY	JOB_CODE	DESCRIPTION
541	10	NETWORK ADMINISTARTOR
541	12	INFO SYS MANAGER
561	61	LEGAL

Skill Set Data

JOB_FAMILY	JOB_CODE	QUAL	TITLE
541	10	5	NETWORK ADMINISTARTOR
541	12	7	INFO SYS MANGER
561	61	3	APP LEGAL
561	61	5	JO LEGAL
561	61	7	MA LEGAL

Skill Set Data

Interim 60-Day Solution

- **Requisition**
  - **Requisitions are developed by RCN and paygrade based upon inventory management business rules…Navy Manning Plan**
  - **NECs are assigned to the requisition based on inventory calculations and paygrade spreads**
  - **Re-wrap the legacy requisition in Sea warrior language to connect to the 5VM**
  - **EPMAC complete 30 Aug 04!**

Interim 60-Day Solution (cont.)

- **Goal to have every requisition assigned a valid job_family and job_code to connect to the 5VM**
  - **Some RCNs did not have a good job_family fit**
  - **Feedback provided to both ADM Talbot, NAVMAC and SkillsNet**
  - **qual (Master, Journeyman, Apprentice) derived from the requisition paygrade**

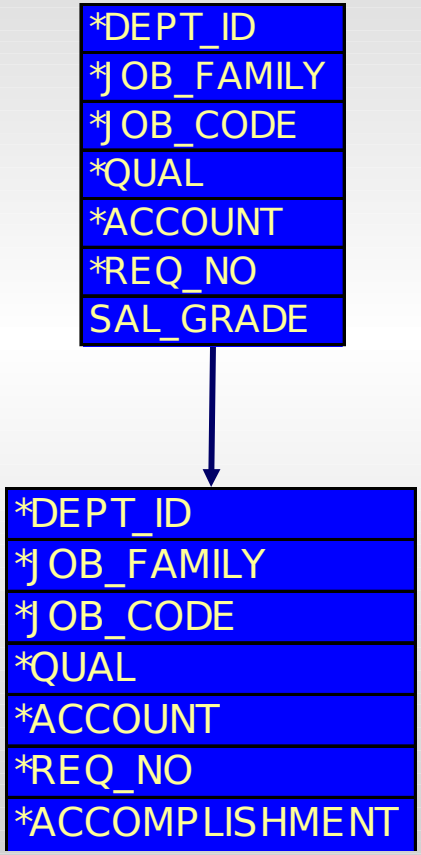
Interim 60-Day Solution (cont.)

- **The best job family and job code is selected based on the NEC that is most appropriate for the paygrade.**
  - **Primary NEC is always looked at first**
  - **Secondary NEC**
  - **R-line NECs in percent manning priority**
- **All requisitions have a default**
  - **Use JF/JC of the greatest BA for the RCN at the activity**

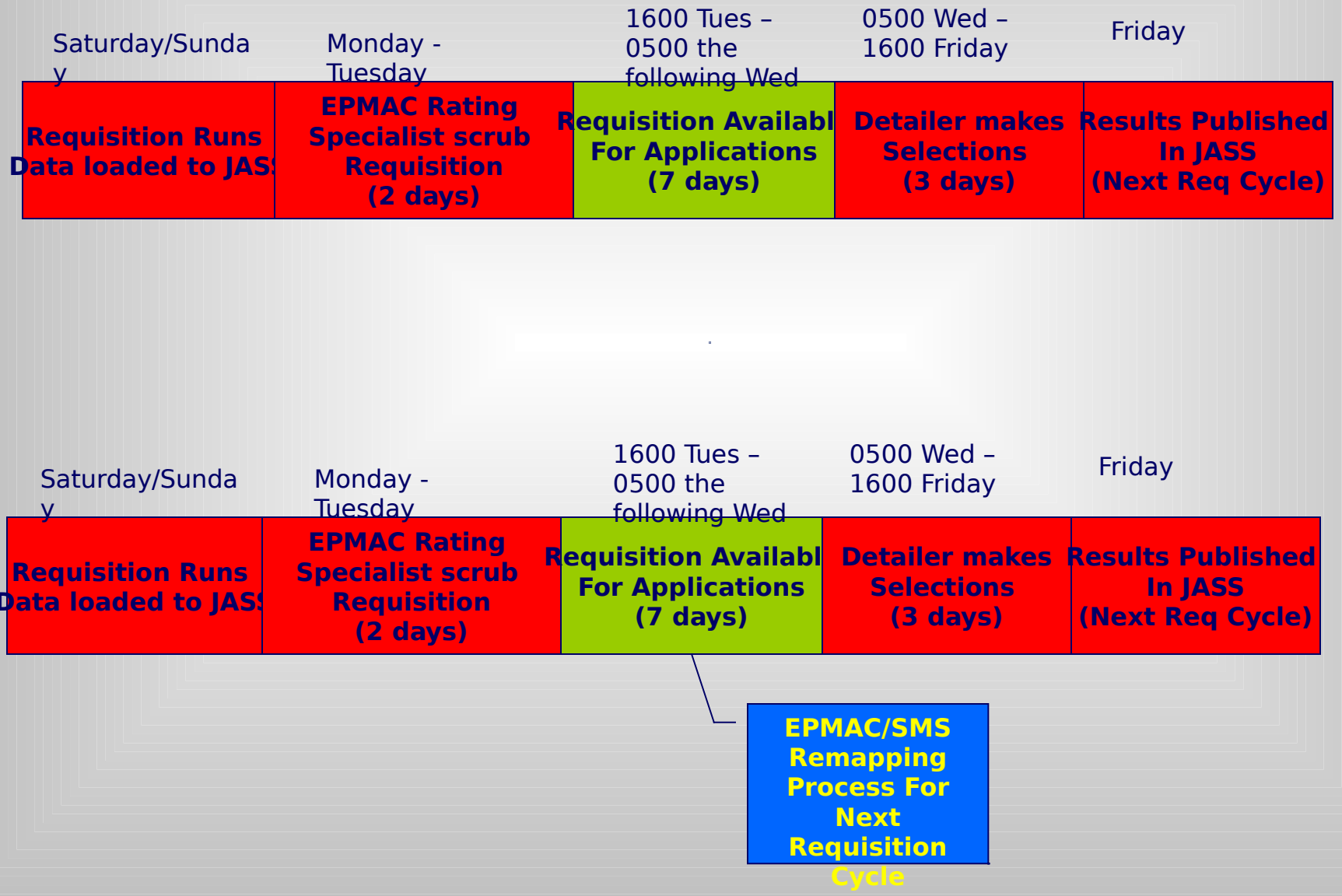
    OR
  - **Use JF/JC of the greatest BA for the RCN in the Navy**

Sea Warrior Wrapped Legacy Requisition

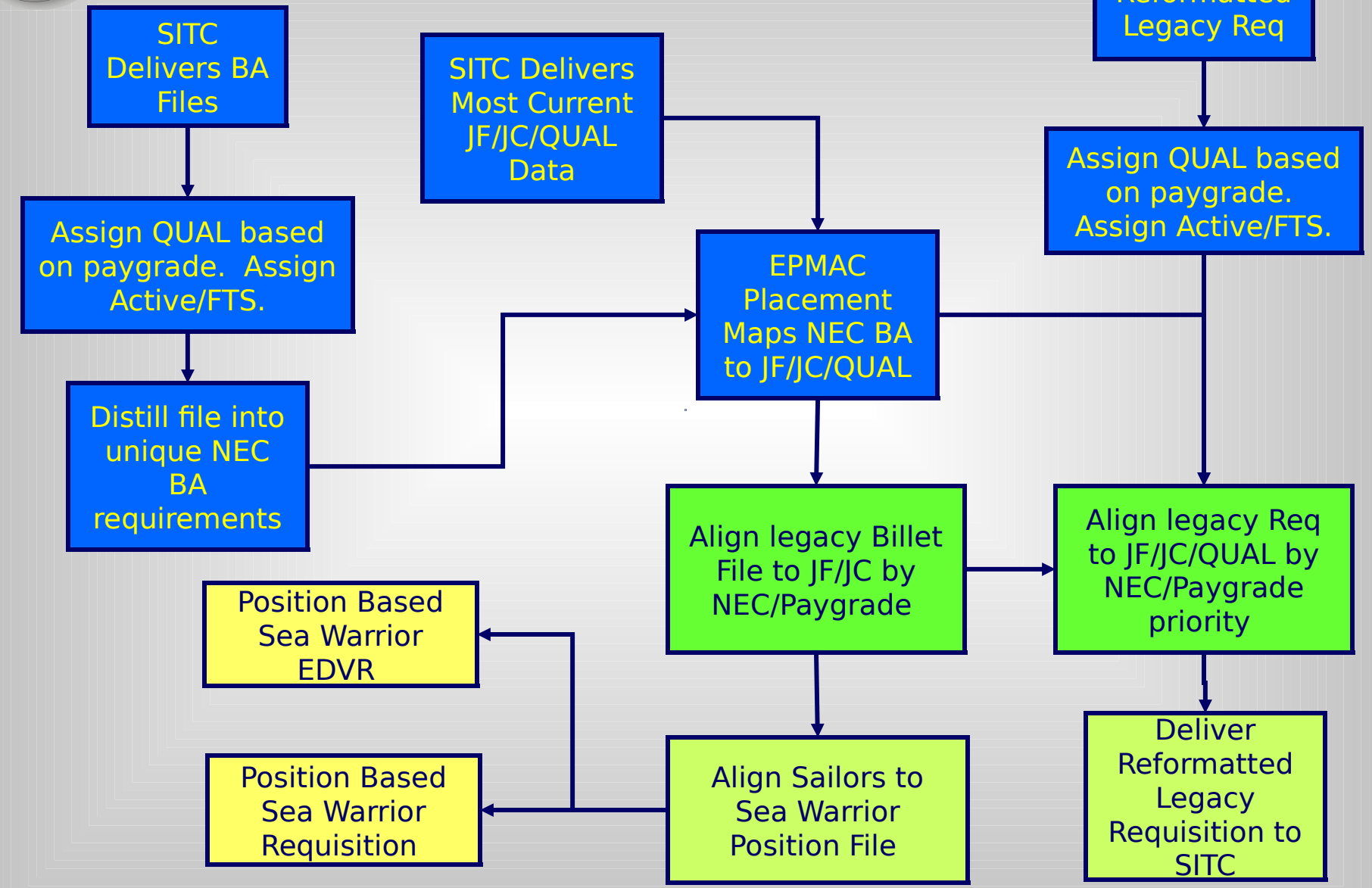
Note: All Sea Warrior Requisitions will have at least one RCN accomplishment. FAC codes I, Q and Z will be assigned as 9502 accomplishment, SSBI certification, BESS accomplishment respectively.



Requisition Re-mapping Process



EPMAC Process



Sea Warrior Long-term

- **Derive the Sea Warrior Position File**
- **Assign Sailors to Sea Warrior Positions**
- **Identify vacant positions, either current or projected**
- **Prioritize open positions**
- **Identify Sea Warrior rollers**
- **Assign rollers to prioritized vacant positions**

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Project Phases

- **Derive the Sea Warrior Position File**
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- **Assign rollers to prioritized vacant positions**

Deriving the Sea Warrior Position File

SkillsNET Title	Job Title (30)	ACTIVE JOB CODES	Mapping
Radio Frequency (RF) Systems Technician	RF SYSTEMS TECH	541303	P2363, P2319, P2318, P2379, P2301, P2777, P2778, P2782, P2375, P2709, P2720, P2378, P2358, P2354
Message Processing Technician	MSG PROCESSING TECH	541703	P2782(*)
Technical Services Support Technician	TECHNICAL SVCS SUPP TECH	541113	P2735, P2777, PNULL/9502, NO NECS AND ANY JOB TITLE WITH IT/COMP/NET, ANYTHING REMAINING
Information Systems Network Analyst	INFO SYS NETWORK ANALYST	541205	P2730, NO NECS AND ANY JOB TITLE WITH IT/COMP/NET
Network Administrator	NETWORK ADMINISTRATOR	541105	P2735
Telecommunications Specialist	TELCOMM SPEC	541905	P2363, P2319, P2318, P2379, P2301, P2777, P2778, P2782, P2375, P2709, P2720, P2378, P2358, ANY THING REMAINING
Network Security Specialist	NETWORK SECURITY SPEC	541605	
Network Systems Specialist	NETWORK SYS SPEC	541405	P2781, P2779, P2780
Information Systems Manager	INFO SYS MGR	541127	P2781, P2730, P2779, P2735, P2780, NO NECS AND ANY JOB TITLE WITH IT/COMP/NET
Electronic Key Management Systems (EKMS)/ Communication Security (COMSEC) Custodian	EKMS/COMSEC CUSTODIAN	541517	ANY JOB TITLE WITH CMS/EKMS/CRYPTO
Spectrum Manager	SPECTRUM MGR	541817	P2363, P2318, P2319, P2379, P2301, P2777, P2778, P2782, P2375, ANYTHING REMAINING

Deriving the Sea Warrior Position File (cont.)

- **All NECs were assigned as accomplishments with a one-to-many relationship to the position file**
- **Recognized that some legacy billets did not contain any NECs**
  - **Resulted in some positions having no accomplishments**
  - **Included RCN as an accomplishment resulting in every position having at least one accomplishment**
- **Include legacy BIN as a field in the Sea Warrior Position to provide additional traceability**
- **Included FAC codes as accomplishments or certifications**

Deriving the Sea Warrior Position File (cont.)

- **Results:**
  - **10303 legacy IT billets, 10303 Sea Warrior job_family 541 positions**
  - **7662 legacy IT NECs assigned to billets, 7661 Sea Warrior job_family 541 Accomplishments (duplicate primary and secondary NECs)**
  - **9087 legacy YN, RP, LN, CTA billets, 9084 Sea Warrior job_family 561 positions (UICs 00120 and 10560 do not exist in RIS)**
  - **857 legacy YN, RP, LN, CTA NECs, 857 Sea Warrior job_family 561 Accomplishments**

Deriving the Sea Warrior Position File (cont.)

DEPT_ID	JOB_TITLE	SAL_GRADE	ACCOUNT	POSITION_ID	SEA_DUTY_CREDIT	SHORE_COMMAND	CONUS
61057	APP LEGAL (561-61-3)	4	A	1	N	Y	N
4544A	APP NAVY ADMINISTRATION SPECIALIST (561-66-3)	3	A	2	N	Y	Y
66754	APP PERSONNEL SECURITY SPECIALIST (561-11-3)	4	A	1	N	Y	N
57079	APP RELIGIOUS SPECIALIST (561-65-3)	3	A	1	Y	N	N
60191	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	Y
30722	INFORMATION SYSTEMS MANAGER (541-12-7)	7	T	1	N	Y	Y
55223	INFORMATION SYSTEMS NETWORK ANALYST (541-20-5)	5	A	2	N	Y	Y
47138	JO LEGAL (561-61-5)	6	A	1	N	Y	Y
4138A	NETWORK ADMINISTRATOR (541-10-5)	5	A	29	N	Y	Y
70278	NETWORK SYSTEMS SPECIALIST (541-40-5)	6	A	1	N	Y	N
70294	RADIO FREQUENCY (RF) SYSTEMS TECHNICIAN (541-30-3)	4	A	67	N	Y	N
42091	SPECTRUM MANAGER (541-81-7)	7	A	2	N	Y	Y
20574	TECHNICAL SERVICES SUPPORT TECHNICIAN (541-11-3)	3	A	1	Y	N	Y

Deriving the Sea Warrior Sailor

- **Sailors are assigned to a job_family based on their RCN**
- **All NECs were assigned as Sailor accomplishments with a one-to-many relationship to the Sailor file.**
  - **Some legacy Sailors did not have any NECs which resulted in some Sea Warrior Sailors having no accomplishments**
  - **Included RCN as an accomplishment resulting in every Sailor having at least one accomplishment.**

Aligning Sailors to Positions in Sea Warrior

- **Only one incumbent Sailor to a position, inbound Sailor capability for projected gains**
- **Once a Sailor is assigned to a position, the Sailor and Position are eliminated from subsequent steps**
- **Eligible Sailors were matched to positions by job_family**
- **Accomplishment optimization:**
  - **RCNs are assigned as accomplishments**
  - **NECs are assigned as accomplishments**
  - **FAC Q is assigned as a certification (SSBI), position side only**
  - **FAC Z is assigned as a certification**

Aligning Sailors to Positions in Sea Warrior (cont.)

- **Step 1: Positions without SSNs assigned were sorted by the dept_id (UIC), job_family, sal_grade (paygrade), account and number of accomplishments, in descending order of number of accomplishments. This would put a position with 3 accomplishments before a position with 2 accomplishment. Positions without accomplishments were eliminated. Sailors with accomplishments were selected to these positions by dept_id, job_family and sal_grade, that held the most matching accomplishments, and at least two matching accomplishments.**

Aligning Sailors to Positions in Sea Warrior (cont.)

- **Out of 10303 job_family 541 positions, 8381 (81.3%) have Sailors assigned to them. The remaining 2288 job_family 541 Sailors were not assigned to positions. Options for the remaining Sailors include processes such as legacy Paygrade Substitutions or assigning the Sailor in excess at the activity.**
- **On the position side, this left 1922 job_family 541 positions without Sailors assigned. There are 1928 N requisitions and 815 A requisitions in the legacy system.**

Prioritizing Vacant Positions in Sea Warrior

- **Vacant positions were identified as positions without SSNs assigned. These positions were given a TUM of current.**
- **Projected vacant positions were identified as:**
  - **Positions where a Sailor was assigned**
  - **Sailor is identified as a roller**
  - **No projected gain to the position**

Prioritizing Vacant Positions in Sea Warrior (cont.)

- **Percent manning levels were calculated within a dept_id by:**
  - **Job_family, job_code, qual**
  - **Job_family, job_code**
  - **Job_family**
- **CNO priority is a yes/no field**
- **Included MCA boost Field, no values**

Prioritizing Vacant Positions in Sea Warrior (cont.)

Req_pri = a1(TUM) + a2(cno_pri) +
a3(perc_qual) +
a4(perc_jc) + a5(perc_jf) +
a6(mca_boost) + a7(x7) + …+an(xn)

- Goal is to prioritize vacant positions by as many parameters as we can think of
- Table with “one row” will hold all equation coefficients of “1s” (may be a number higher or lower than 1) or “0s”…equates to a switch that can be turned on and off at a whim

Prioritizing Vacant Positions in Sea Warrior (cont.)

DEPT_	JOB_TITLE	SAL_GRADE	ACCOUNT	POSITION_ID	SEA_DUTY_CREDIT	SHORE_COMMAND	CONUS	TUM	CNO_PRI	PERC_QUAL	PERC_JC	PERC_JF	MCA_BOOST
61057	APP LEGAL (561-61-3)	4	A	1	N	Y	N	24-Jun-04	N	0.0%	50.0%	90.9%	
09485	APP NAVY ADMINISTRATION SPECIALIST (561-66-3)	3	A	10	N	Y	Y	24-Jun-04	N	70.6%	78.3%	78.3%	
30508	APP PERSONNEL SECURITY SPECIALIST (561-11-3)	4	A	1	N	Y	Y	24-Jun-04	N	50.0%	66.7%	66.7%	
00204	APP RELIGIOUS SPECIALIST (561-65-3)	3	A	1	N	Y	Y	24-Jun-04	N	0.0%	60.0%	62.5%	
20748	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	Y	24-Jun-04	N	0.0%	0.0%	98.5%	
47871	INFORMATION SYSTEMS MANAGER (541-12-7)	7	A	2	N	Y	Y	24-Jun-04	Y	0.0%	0.0%	20.0%	
62874	INFORMATION SYSTEMS NETWORK ANALYST (541-20-5)	5	A	2	N	Y	N	24-Jun-04	Y	50.0%	50.0%	33.3%	
70278	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	N	1-Feb-05	N	0.0%	0.0%	59.4%	
62661	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	Y	24-Jun-04	N	0.0%	0.0%	0.0%	
00166	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	Y	24-Jun-04	N	0.0%	0.0%	50.0%	
61035	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	Y	24-Jun-04	N	0.0%	0.0%	50.0%	
48388	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	Y	24-Jun-04	N	0.0%	0.0%	60.0%	
60191	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	N	Y	Y	1-Mar-05	N	0.0%	0.0%	50.0%	
20865	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	N	24-Jun-04	N	0.0%	0.0%	56.5%	
20635	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	N	24-Jun-04	N	0.0%	0.0%	64.9%	
07172	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	N	24-Jun-04	N	0.0%	0.0%	82.3%	
21686	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	N	1-Jan-05	N	0.0%	0.0%	83.3%	
23146	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	Y	24-Jun-04	N	0.0%	0.0%	0.0%	
23147	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	Y	24-Jun-04	N	0.0%	0.0%	0.0%	
23148	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	Y	24-Jun-04	N	0.0%	0.0%	0.0%	
23149	EKMS/COMSEC SECURITY CUSTODIAN (541-51-7)	7	A	1	Y	N	Y	24-Jun-04	N	0.0%	0.0%	0.0%	

Optimizing Rollers to Vacant Positions

- Processes will be very similar to assigning Sailors to Positions
- The “sea_duty_credit” switch will make the process even easier
- Major considerations:
  - Maximize accomplishment usage…minimizes training costs
  - Sal_grade…qual…job_family
- Potential future outputs, projected training gap for the population of rollers

Aligning Sailors to Positions in Sea Warrior (cont.)

- **Step 2: Identical to step 1 but Sailors are aligned by sal_grade priority**
  - **Apprentice alignment**
  - **E6 Sailor to E5 position, E5 Sailor to E6 position**
  - **E8 Sailor to E9 position, E8 Sailor to E7 position, E9 Sailor to E8 position, E9 Sailor to E7 position,**
  - **E7 Sailor to E8 position, E7 Sailor to E6 position, E7 Sailor to E9 position**

Aligning Sailors to Positions in Sea Warrior (cont.)

- **Step 3: Identical to step 1, sal_grade match, but requires only 1 matching accomplishment**
- **Step 4: Identical to step 2, sal_grade priority, but requires only 1 matching accomplishment**
- **Step 5: Unassigned Sailors that match at least 1 accomplishment**
  - **E9 Sailor to E6, 5, 4, 3, 2, 1 position**
  - **E8 Sailor to E6, 5, 4, 3, 2, 1 position**
  - **E7 Sailor to E5, 4, 3, 2, 1 position**
  - **E6 Sailor to E4, 3, 2, 1 position**
  - **E5 Sailor to E3, 2, 1 position**

Aligning Sailors to Positions in Sea Warrior (cont.)

- **Step 6**
  - **Step 1: no matching accomplishments**
  - **Step 2: no matching accomplishments**
  - **Step 3: no matching accomplishments**
  - **Step 4: no matching accomplishments**
  - **Step 5: no matching accomplishments**
- **Step 7: Unassigned Sailors are aligned in excess by job_family and job_code**
- **Step 8: Inbound Sailors ran through same process**